

REMARKS

Claims 7, 8 and 10-17 are pending in the above-identified application. Claims 7, 8 and 10-17 were rejected.

35 U.S.C. § 103 Obviousness Rejection of Claims

Claims 7, 8, 10-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Gozdz et al.* (U.S. Patent No. 5,840,087) in view of *Kumeuchi et al.* (U.S. Patent No. 6,156,080). In response, Applicants submitted that the rejection is improper in that, *inter alia*, *Gozdz et al.* does not teach the lamination of cell structures comprising electrolyte layers.

In particular, Applicants pointed out the following:

Gozdz et al. does not disclose methods for laminating solid electrolyte layers, wherein such layers are already on the surface of the electrodes. Rather, the cited reference discloses the use of traditional separators, as set forth in Example 1, i.e. “tough, flexible, plasticized films” of polymeric origin (See col. 3, ll. 51-67) that are prepared as a separate unit from the electrodes. As such, the separators of Gozdz et al. of Example 1 are then assembled, sandwich-like, between the electrodes and laminated thereto (See col. 5, ll. 46-49; Fig. 2).

(See Response to October 21, 2005 Office Action, page 6, third full paragraph).

In the Advisory Action of June 16, 2006 the Examiner maintained the rejection, stating that the application had not been placed into condition for allowance because:

Applicant states that Gozdz does not teach “solid” electrolytes. However, Gozdz teaches gelled electrolytes, which is a subset of “solid” electrolytes. The gelled electrolyte of Gozdz comprises PVDF. The instantly claimed electrolyte may also be gelled and may also comprise PVDF (See, e.g., instant claims 8 and 12). Because the electrolytes comprise the same materials, the electrolyte of Gozdz must be “solid” as recited in claim 7.

(See Advisory Action of June 16, 2006, page 2).

Applicants submit that the above argumentation is in error, as the methods disclosed by *Gozdz et al.* are not directed to the lamination of electrolytes, either solid or in any other physical state. More particularly, the products yielded by the lamination methods *Gozdz et al.* are specifically devoid of electrolytes.

Gozdz et al. is directed to methods of cell fabrication of the type described in greater detail in U.S. Pat. No. 5,460,904 (" '904 ") (See *Gozdz et al.*, col. 1, lines 28-32). Such methods are drawn to the manufacture of a battery cell structure by the lamination of assemblies that comprise copolymers and plasticizers (See '904, col. 3, lines 21-27). As stated above, the products of such lamination processes are specifically devoid of electrolyte salts (See '904, col. 3, line 38). As such, they cannot possibly be electrolytes of any kind, let alone gel electrolytes.

Electrolytes are introduced in the laminated structure of *Gozdz et al.* only after the lamination process, i.e. when the battery is put into service. This is achieved by immersing the laminated cell structure in an electrolyte salt solution which will imbibe the copolymer membrane matrix to provide the ionic conductivity enhancement. Prior to the above imbibing, the plasticizer is preferably removed by immersion of the above laminate in a copolymer-inert, low-boiling solvent, which selectively leaches the plasticizer without affecting the polymer matrix (See '904, col. 3, 47-64).

Consequently, Applicants would like to point out once more that *Gozdz et al.* is directed to art that is non-analogous to the claims as presently amended. Although the batteries disclosed by the cited reference ultimately include electrolyte salts --as should indeed be expected of a Li-ion battery cell-- the methods of *Gozdz et al.* are unequivocally and explicitly directed to the lamination of structures devoid of electrolytes. Accordingly, such methods bear no analogy to

Response to October 21, 2005 Office Action

Application No. 09/504,813

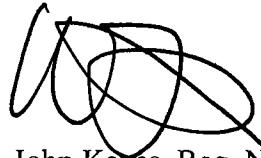
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methods specifically directed to the lamination of electrolyte layers such as the methods of the claims in their present form. The rejection is therefore improper.

In view of the foregoing, Applicants submit that the application is in condition for allowance. Notice to that effect is respectfully requested.

Dated: August 23, 2006

Respectfully submitted,



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